



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/779,751

02/18/2004

Jin-Ho Park

1349.1292

2039

21171 7590 02/14/2008

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

UHLLENHAKE, JASON S

ART UNIT

PAPER NUMBER

2853

MAIL DATE

DELIVERY MODE

02/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/779,751	Applicant(s) PARK ET AL.	
	Examiner JASON S. UHLENHAK	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 2-9 and 12-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (U.S. Pat. 6,334,663).

Lee discloses:

- ***regarding claims 1, 11***, head caps (350) to revolve between a capping position and an uncapping position; a slider (380, 110) to slide with respect to the head caps, and having wipers (210, 200) mounted on a front end portion thereof; a slider movement unit (2) to slide the slider; (Figures 4-6; Column 5, Lines 32-65)
- a revolution unit (310) disposed between the head caps and the slider to revolve the head caps in association with the sliding of the slider with respect to the head caps (Figures 4-7)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. Pat. 6,334,663) in view of Tee et al (U.S. Pat. 6,679,579)

Lee discloses all the claimed limitations above except for the following:

- ***regarding claim 10***, the slider slides in a perpendicular direction with respect to a printing direction of the printer heads

Tee discloses:

- ***regarding claim 10***, the slider slides in a perpendicular direction with respect to a printing direction of the printer heads (Figures 1-2; Column 3, Lines 30-40), for the purpose of maintaining inkjet print head at its optimal condition

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Tee into the device of Lee, for the purpose of maintaining inkjet print head at its optimal condition

Response to Arguments

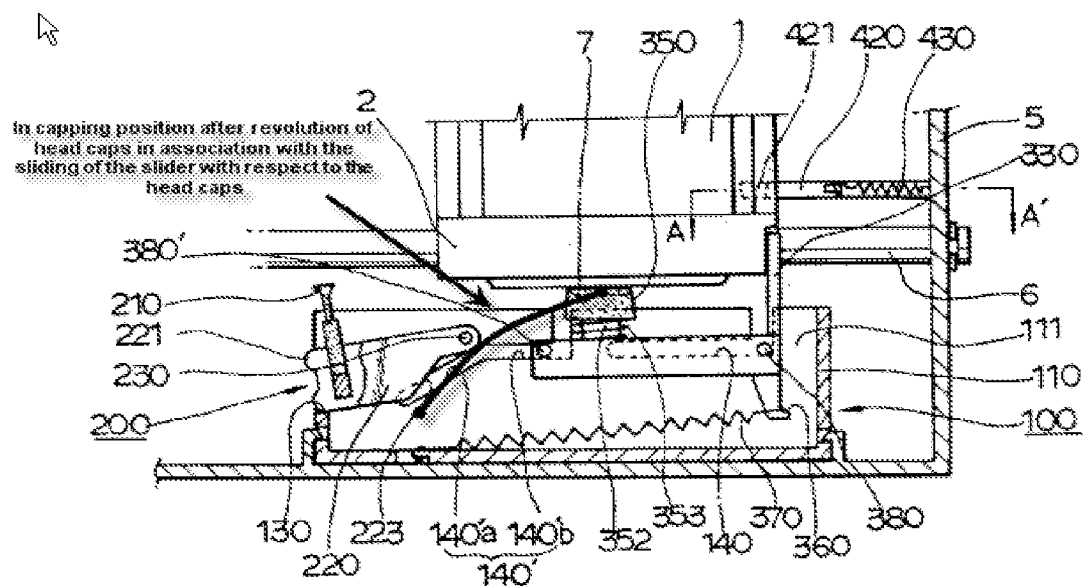
Applicant's arguments filed 11/21/2007 have been fully considered but they are not persuasive.

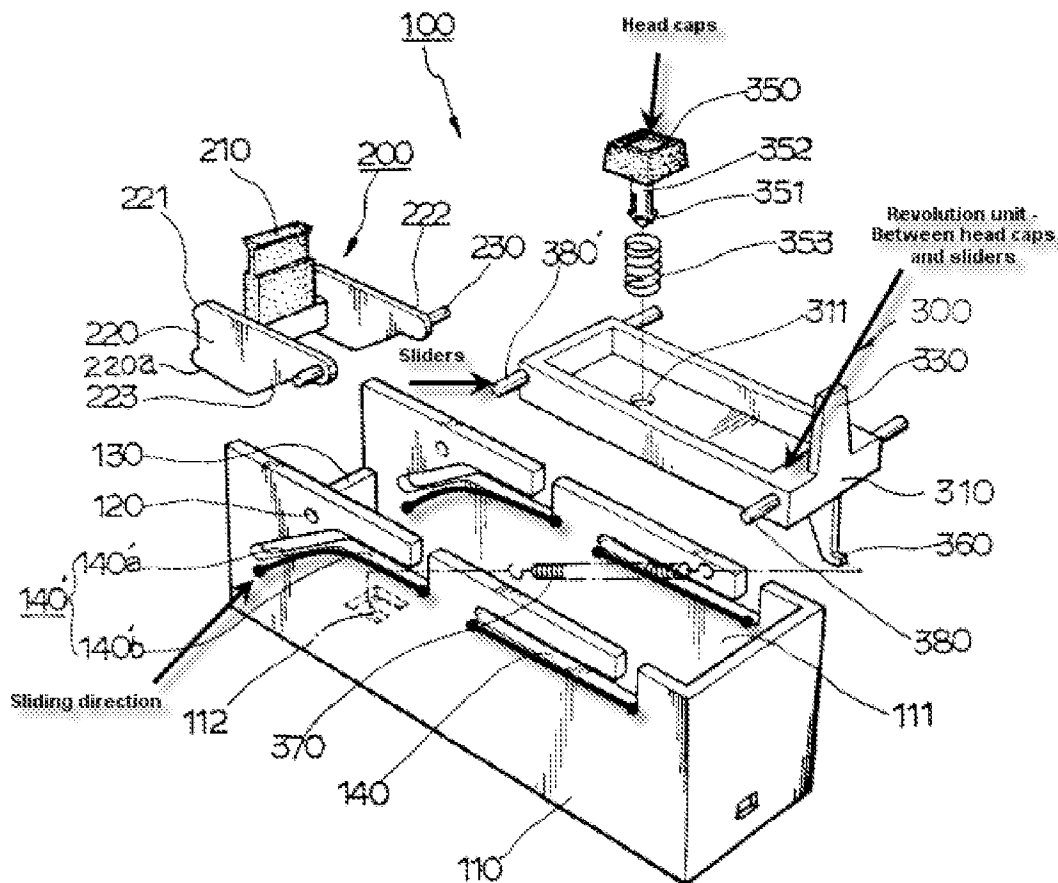
Applicant argues that Lee does not disclose wipers mounted on a front end portion thereof, however as seen in figures 4-7 the slider (380, 110) slides with respect to the head caps, the pin members (230) of the wiper are inserted into the holes (120) of the slider (110, 380) and the wiper (200, 210) is mounted on the front end portion of the slider (110, 380). Therefore all of the slider limitations as claimed are disclosed.

Art Unit: 2853

Applicant argues that Lee does not disclose a slider movement unit to slide the slider, however, Lee discloses that the touch guide (330) is forced to the service area by the carriage (slider movement unit 2) and the moving member (revolution unit 310) is moved by the guide pins in the housing (slider 380,110) (Figures 4-7; Column 7, Lines 3-20), therefore all of the slider movement unit limitations as claimed are disclosed.

Applicant argues that Lee does not disclose a revolution unit disposed between the head caps and the slider to revolve the head caps in association with the sliding of the slider with respect to the head caps. However, as see by Figures 6-7, the moving member (310) and the head caps (350) move in a curved path (revolve) in association with the sliding of the slider.





Applicant argues that Tee does not disclose a slider that slides in a perpendicular direction with respect to a printing direction of the printer heads, however Tee discloses that the direction of both the slot and the rack of the wiper assembly are substantially parallel to the media advancement direction. Therefore the slider slides in a perpendicular direction with respect to a printing direction of the printer heads (refer to figure below) (Column 3, Lines 20-40; Figures 1-2)

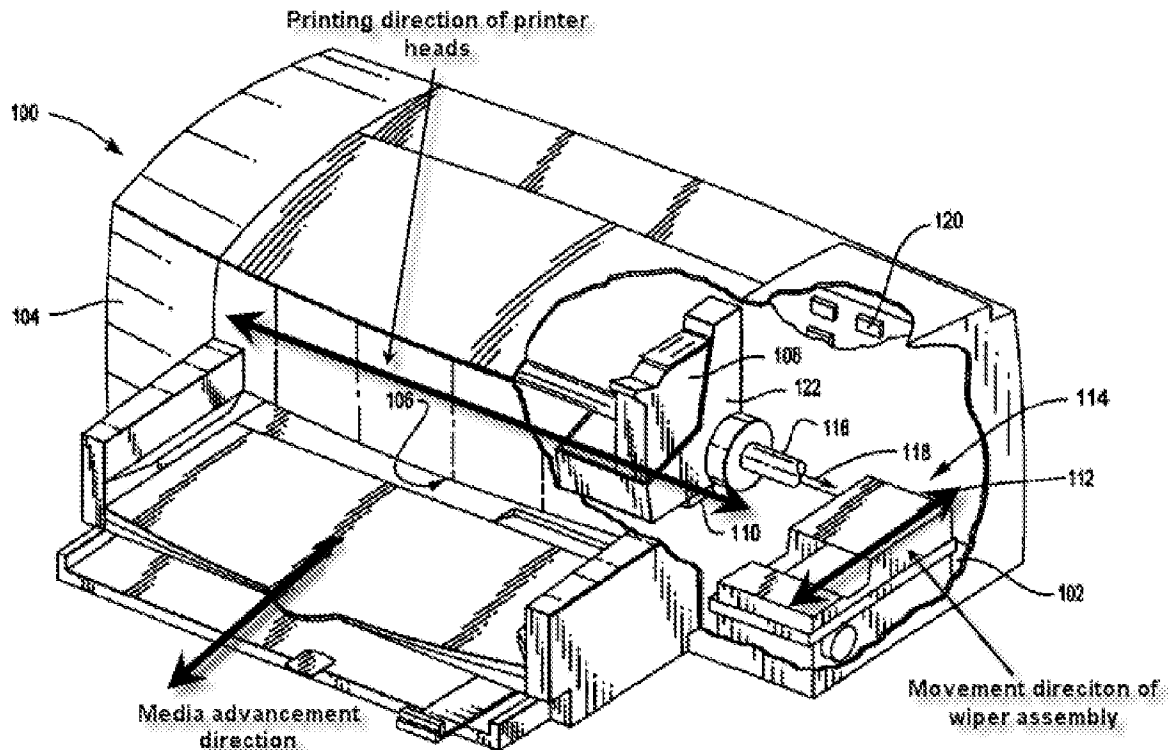


Figure 1

Allowable Subject Matter

Claims 2-9, 12-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The primary reason for indication of allowable subject matter of claims 2, 4-8 is the inclusion of the limitation of a shaft disposed under the printer heads, a revolving

Art Unit: 2853

member to revolve on the shaft and coupled with the head caps thereon; and links, each hingedly coupled to the revolving member and the slider, to activate the revolving member while interlocking with the slider. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for indication of allowable subject matter of claims 3, 17-21 is the inclusion of the limitation of a first hinge shaft to protrude on a side of the slider; and a second hinge shaft to protrude on a side of the revolving member, wherein the second hinge shaft is located a position lower than the first hinge shaft when the slider and revolving member are disposed in parallel to each other. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the indication of allowable subject matter of claim 9 is the inclusion of the limitation of a rack provided on an upper surface of the slider along a sliding direction. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for indication of allowable subject matter of claims 12-15 is the inclusion of the limitation of a shaft to couple to the revolving member to move upward and downward in the casing and mounted in front of the entrance of the casing; and links to connect the revolving member and the slider. It is this limitation found in

Art Unit: 2853

each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for indication of allowable subject matter of claim 16 is the inclusion of the limitation of a spittoon connecting portion provided with a pair of spitting holes on opposite sides of the slider, wherein the spitting holes of the spittoon connecting portion are aligned with the slits of the wiper connecting portion. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Uhlenhake whose telephone number is (571) 272-5916. The examiner can normally be reached on Monday - Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. U./
Examiner, Art Unit 2853

/Julian D. Huffman/
Primary Examiner, Art Unit 2853
13 February 2008